

Horses and mules powered New York's canal system until 1918. They walked on towpaths, connected to boats by a long towline. Animals and crews usually worked in shifts around the clock: six hours on, six hours off, resting in stables and bunks on board between shifts.

The Erie Canal opened vast areas of the upper Midwest to settlement and commercial agriculture because it was the first reliable, inexpensive way to carry heavy, bulky cargo between the Great Lakes and the Atlantic Seaboard.

Connecting to New York City via the Hudson River at Albany, the canal exploited the only low-elevation passage through the eastern mountain chains between Georgia and Canada. Alternative routes via the Ohio and Mississippi rivers or St. Lawrence River (map at right) took longer to navigate and were subject to delays from flood, drought, and ice. These routes also reached tidewater far from major population centers.

Other canals—in Pennsylvania, Maryland, and Virginia—that sought to breach the mountain barrier and capture Erie Canal trade lacked such topographical advantage. Most were not completed, and none proved a financial success.



# A Water Route to National Unity and World Trade

Americans have always been a restless lot, with an urge to move beyond their home territories. For many at the beginning of the 19th century, the Erie Canal was the route to opportunity and prosperity in the American interior. Long before railroads, interstate highways, or jets the Erie Canal opened the interior of a continent and shaped the future of a young nation.

**Opening America** The Erie Canal was North America's most successful and influential public works project. Built between 1817 and 1825, this 363-mile-long canal was the first all-water link between the Atlantic seaboard and Great Lakes. New York Governor DeWitt Clinton relentlessly promoted its construction. Skeptics just as forcefully derided it as "Clinton's Ditch," but Clinton would be vindicated. The canal advanced Euro-American settlement of the Northeast, Midwest, and Great Plains, sometimes at the expense of Native populations. It fostered national unity and economic power. It made New York the Empire State and New York City the nation's prime seaport and seat of world trade.

**An Engineering Marvel** Originally 4 feet deep and 40 feet wide, the Erie Canal cut through fields, forests, rocky cliffs, and swamps; crossed rivers on aqueducts; and overcame hills with 83 lift locks. The project engineers and contractors had little experience building canals, so this massive project served as the nation's first practical school of civil engineering. Some laborers were Irish immigrants, but most were U.S.-born. For eight years of wet, heat, and cold, they felled trees and excavated, mostly by hand and animal power, mile after mile. They devised equipment to uproot trees and pull stumps and developed hydraulic cement that hardened under water. With hand drills and black powder they blasted rocks. Their ingenuity and labor made the Erie Canal the engineering and construction triumph of its day.

**Faster, Cheaper** Canal packet boat passengers traveled in relative comfort from Albany to Buffalo in five days—not two weeks in crowded stagecoaches. Freight rates fell 90 percent compared to shipping by ox-drawn wagon. Freight boats carried Midwestern produce from Buffalo to Albany.

Most continued on to New York City's seaport, towed down the Hudson in fleets behind steam tugboats. Midwestern farmers, loggers, miners, and manufacturers found new access to lucrative far-flung markets.

**A Flow of People and Ideas** The Erie Canal and a system of connecting waterways fulfilled DeWitt Clinton's prophecy that New York would be America's preeminent state, populated from border to border and generating wealth for itself and the nation. Soon New York City was the nation's busiest port, most populous city, and foremost seat of commerce and finance. Immigrants knew they could find work there or in many new cities sprouting along the canal. As it opened the American interior to settlement, the canal brought a flow of people and new ideas. Social reform movements like abolitionism and women's suffrage, utopian communities, and various religious movements thrived in the canal corridor. The Erie Canal carried more westbound immigrants than any other trans-Appalachian canal. These newcomers infused the nation with different languages, customs, practices, and religions.

**Continuing the Connection** Success quickly spurred expansion and enlargement of New York's canal system to handle more and bigger boats. It triggered canal mania—a rash of canal building across the eastern United States and Canada in the mid-1800s, before railroads became the principal means of hauling freight and passengers. From 1905 to 1918 New York State built the Barge Canal system, a robust grandchild of the Erie, Champlain, Oswego, and Cayuga-Seneca canals.

Although commercial traffic declined after the St. Lawrence Seaway opened in 1959, New York's Canal System is still in service. New York canals, both active and retired, are now vibrant places to enjoy both water- and land-based recreation and to learn about and celebrate our nation's heritage.

## Path of Least Resistance

Canal engineers chose the path of least resistance across New York State's complex topography, but the route was not always easy. The map at right shows mid 19th-century New York at the peak of its canal era when a system of artificial waterways reached throughout the state. Several canals were abandoned in the face of competition from railroads, but the Erie, Champlain, Oswego, and Cayuga-Seneca canals are still operating today.



## Profile in Locks and Levels

Canals conquer space with successions of lift locks and levels. Lake Erie is 570 feet higher than the Hudson River at Albany. On the original Erie Canal, 83 stone-walled locks lifted and lowered boats in an irregular staircase.

**Canal Topography Profile** The heavy brown line atop the historic map at right shows the changes in elevation overcome by the Erie Canal's locks between Albany and Buffalo.

Sixteen locks were required to climb out of the deep Hudson Valley past Cohoes Falls near the mouth of the Mohawk River. The canal climbed steadily along the Mohawk from Schenectady to another steep rise at Little Falls. From there the long level—a 58-mile stretch of flat water requiring no lock—carried boats over a drainage divide at Rome and on to relatively flat terrain south of Oneida Lake and north of the Finger Lakes.

The final barrier westward was at Lockport where twin, five-lock staircases, called "the Lockport Flight," climbed the steep Niagara escarpment. A deep rock cut then opened a watery path on to Lake Erie and the upper Great Lakes.

Paintings, songs, illustrations, stories, furniture, decorative pottery, and photographs celebrated the New York canal system. Late 19th- and early 20th-century postcards show structures, settlements, scenery, and canal boats from one end of the state to the other.



At Buffalo, Midwest products were transferred from lake steamers and schooners to canal boats.



Rochester was America's first inland boom town. The stone aqueduct carried the enlarged Erie Canal over the Genesee River. It now supports the Broad Street bridge.



Syracuse's Clinton Square made it clear why people called the canal "New York's Main Street."



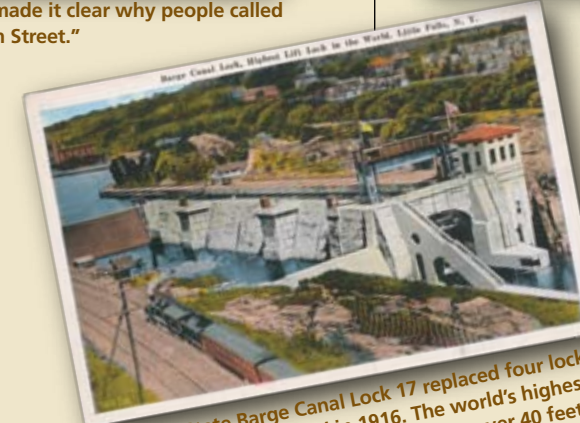
Connecting the Hudson River to Lake Champlain at Whitehall, the Champlain Canal opened markets for forests, farms, mines, and mills in New York's Adirondack region and in Vermont.



Twinned sets of five locks at Lockport let boats overcome the steep Niagara escarpment that gives rise to Niagara Falls. These canal structures remain landmarks today.



Lyons typifies how communities' grocery stores, taverns, factories, and warehouses edged the canal to supply goods and services to canal boaters and to villagers.



New York State Barge Canal Lock 17 replaced four locks of the Enlarged Erie Canal in 1916. The world's highest single lift lock at the time, it raised boats over 40 feet.

## New York State Canals

### 1790s

Mohawk River canals and locks built by the Western Inland Lock Navigation Company allow freight boats to travel from Schenectady to Oswego and Seneca Lake.

### 1817–1825

New York State builds Erie and Champlain canals. Erie connects Hudson River with Great Lakes: 363 miles long. Champlain connects Hudson River with Lake Champlain: 66 miles. Both canals are 4 feet deep; locks 90 feet long, 15 feet wide; boat capacity 30 tons.

### 1826–1836

Fueled by its Erie Canal success, New York State builds the Oswego, Cayuga-Seneca, Chemung, Crooked Lake, and Chenango canals.

### 1836–1862

Success-choked Erie, Champlain, and Oswego canals are enlarged: 7 feet deep; locks 110 feet long, 18 feet wide; boat capacity 240 tons. Twinned chambers lock boats through in both directions at once. Genesee Valley and Black River canals completed.

### 1870–1896

Chemung, Chenango, Crooked Lake, Oneida Lake, and Genesee Valley canals abandoned, late 1870s. Peak Erie Canal tonnage, 1880; tolls end, 1882. By 1896 lengthened chambers let most Erie Canal locks pass two boats through in tandem.

### 1905–1918

New York State Barge Canal System supersedes Erie, Champlain, Oswego, and Cayuga-Seneca canals. Built for self-propelled vessels it uses canalized rivers, lakes, and land-cut sections, minimum depth 12 feet. Electrically powered locks pass boats 300 feet long.

### 1959

St. Lawrence Seaway opens, allowing ships to go from the Great Lakes directly to the Atlantic Ocean. Commercial traffic declines on New York canals.

### 2000

Congress establishes Erie Canalway National Heritage Corridor to help preserve and interpret New York State's historic canal system and the communities along its banks.

This 1862 painting by William Wall captures a sense of serenity along the Erie Canal as it ran along the Mohawk River's south bank west of Little Falls. The painting is now in the Canojoharie Library and Art Gallery.



# Erie Canalway National Heritage Corridor

There are many partners in Erie Canalway National Heritage Corridor. Information along the canal can be found at the sites shown in green on the map.

Selected 19th-century canal structures are shown in blue. Abbreviations for park areas are listed at right.

**National Park System**  
NHP National Historical Park  
NHS National Historical Site  
NM National Monument  
NST National Scenic Trail

**New York State Park System**  
SCP State Canal Park  
SHA State Heritage Area  
SHP State Historic Park  
SHS State Historic Site  
SP State Park



The 350-mile-long Canalway Trail parallels the Erie Canal from Buffalo to Albany.



Historic cargo vessels, tugs, and pleasure boats operate side-by-side in the Barge Canal system.



Canal towns are great places to explore on foot.



Built to pass 300-foot-long cargo vessels, Barge Canal locks are open to many types of watercraft.



Waterford Tugboat Roundup, Oswego Harbor Fest, and events in many other canalside communities offer up-close opportunities to experience the living heritage of New York's waterways.

**A New Kind of National Park** Erie Canalway National Heritage Corridor is one of nearly 30 federally designated national heritage areas. Its purpose is to help preserve and interpret the historical, natural, scenic, and recreational resources reflecting its national significance and to help foster revitalization of canal-side communities.

Erie Canalway National Heritage Corridor includes 524 miles of navigable waterway that make up the New York State Canal System. It includes the Erie, Cayuga-Seneca, Oswego, and Champlain canals, as well as their historic alignments and the 234 cities, towns, and villages that touch the canal system. The Canalway Corridor encompasses 4,834 square miles in 23 counties and is home to 2.7 million people. Upstate New York's largest population centers—Buffalo, Rochester, Syracuse, and the state capital Albany—all grew up along the canal and are within the Canalway Corridor today.

The Federal Government does not own or manage national heritage area lands as it does with traditional national parks. Instead, people, businesses, non-profit historical and environmental organizations, towns, cities, counties, and the State of New York work together to protect the Canalway Corridor and

prepare for its future. This partnership helps ensure that canals, towpaths, structures, and other historical and natural features remain preserved and accessible to you and to thousands of others who visit every year.

**Things to Do** More than 500 miles of interconnected canals, rivers, and lakes are open to navigation from May 1 through November 15. On-water activities include cruising, rowing, canoeing and kayaking, motor boating, and fishing. Watercraft ranging from canoes and small rowboats to fully equipped canal cruisers may be rented throughout the canal system. You don't need a boat to enjoy the Canalway Corridor. Waterfront parks in communities and at canal locks across the state offer many opportunities to picnic, play, fish, or just sit on the bank and watch the boats go by.

Nearly three-quarters of a 350-mile-long, off-road Canalway Trail has been completed between Albany and Buffalo. When finished it will be the nation's longest multiple-use trail. The trail closely parallels the Erie Canal, giving access to communities and many connecting trails. The Canalway Trail is open to hikers, joggers, and bicyclists as well as cross-country skiers in winter. Some sections are suitable for in-line skating. The Champlain Canal Trail, running from the confluence of the

Mohawk and Hudson rivers at Waterford to Lake Champlain at Whitehall, is still being developed. The navigable canal system and Canalway Trail are operated by the New York State Canal Corporation, a state agency.

Historic sites and museums throughout the Canalway Corridor welcome visitors. Four are national park sites: Theodore Roosevelt Inaugural in Buffalo, Women's Rights in Seneca Falls and Waterloo, Fort Stanwix in Rome, and Saratoga Battlefield in Stillwater and Schuylerville. There are New York State Heritage Area visitor centers at Buffalo, Rochester, Seneca Falls, Syracuse, Schenectady, Albany, Waterford, Cohoes, and Troy, as well as a system of New York State Historic Sites. There are municipal and non-profit museums and historic sites in many canal communities.

Upstate villages and cities are proud of their connections to the canal system. Take some time to stroll through canal towns. Buildings and public spaces from the heyday of canal commerce still give many communities a distinctive character. Check local media for notice of canal heritage days, tug and steamboat gatherings, festivals, farmers' markets, art shows, plays, and concerts.

**How to Get Here** Several interstate highways cross the Erie Canalway National Heritage Corridor. The New York State Thruway (I-90) roughly parallels the Erie Canal route from Albany to Buffalo. Still, the best way to explore canal country by car is along state and county roads that hug the water more closely and thread through the hamlets, villages, and cities that grew along the waterways. These are: N.Y. 31 in western New York, N.Y. 5 and 5S in the east, N.Y. 32 and N.Y. 4 along the Champlain Canal, N.Y. 481 along the Oswego, and a host of smaller roads in between. The Lakes to Locks Passage along the Champlain Canal and the Mohawk Towpath along the eastern end of the Erie have been designated National Scenic Byways. Amtrak provides passenger rail service through the Canalway Corridor with several stops each day in Buffalo, Rochester, Syracuse, Rome, Utica, Schenectady, and Albany and daily service along the Champlain Canal with stops in Fort Edward and Whitehall.

**For More Information** For up-to-date Canalway Corridor information and links to related sites, visit the Erie Canalway National Heritage Corridor websites: [www.nps.gov/erie](http://www.nps.gov/erie) and [www.eriecanalway.org](http://www.eriecanalway.org).

For information about the 524-mile-long system of waterways, boater facilities, and the Canalway Trail along the Erie Canal between Albany and Buffalo, visit the New York State Canal Corporation website: [www.canals.state.ny.us](http://www.canals.state.ny.us). For information about New York State parks, historic sites, and state heritage areas visit: [www.nysparks.state.ny.us](http://www.nysparks.state.ny.us). Parks & Trails New York organizes an annual cross-state bicycle tour along the Erie Canal and publishes a guidebook with maps *Cycling the Erie Canal*: [www.ptny.org/canalway](http://www.ptny.org/canalway). Histories and guidebooks on New York's canals and canal-side communities are legion, with new ones published every year. Check your local library and booksellers.

Erie Canalway National Heritage Corridor is an affiliated area of the National Park System. The National Park Service helps care for special places saved by the American people so that all may experience our heritage. To learn more about parks and National Park Service programs in America's communities visit [www.nps.gov](http://www.nps.gov).